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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,502

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Abbas Razavi

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EXAMINER

RABAGO, ROBERTO

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,502	Applicant(s) RAZAVI, ABBAS	
	Examiner Roberto Rábago	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-49 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 26,28,31,33,35-37 and 39-49 is/are rejected.
- 7) ☒ Claim(s) 27,29,30,32,34 and 38 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/7/2005;8/18/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 35 and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(a) In claim 35, no disclosure can be found to support the limitation "with R at the 3-position."

(b) In claim 42, no disclosure can be found for the olefin being "C₄₊ olefin."

3. Claims 28 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "bulky" is indefinite because it cannot be determined which substituent groups applicants consider to be bulky.

Remarks on Claim Interpretation

4. The limitation in claims 26 and 48 that R" is a bridge which contains "at most one carbon atom" is interpreted consistent with page 12, lines 14-16, wherein it is clear that the moiety which is limited to one carbon atom is the linear chain of atoms which connects the two rings.

The claims separately distinguish cyclopentadienyl, indenyl and fluorenyl groups, and such use is understood to mean that these are non-overlapping entities. For example, claim 26 recites that structure II includes a Cp group which is a cyclopentadienyl ring, and is interpreted to comprise a C₅ aromatic group which is not an indenyl or fluorenyl group. Although the Cp group may be substituted, the substituents may not be joined to form an indenyl or fluorenyl group, because the Cp group would then no longer be considered as a cyclopentadienyl group.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 26, 33, 36, 37, 40, 44, and 47-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Weng et al. (WO 99/29742).

The reference discloses in Examples 1-3 the making of propylene macromers using a metallocene catalyst, followed by copolymerization of said macromers with

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propylene to make a branched isotactic polypropylene, including all claimed limitations.

Although the reference has not mentioned the beta-alkyl elimination mechanism as recited in the instant claims, the reference method uses the same method of obtaining the macromers as set forth in applicant's specification, and therefore at least a non-zero amount of said mechanism would appear to exist in the reference method. The burden of proof is shifted to applicants to show otherwise.

7. Claims 26, 33, 36, 37, 39, 42-44, and 47-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Weng et al. (WO 98/34971).

The reference discloses in Examples 1-6 the making of ethylene macromers using a metallocene catalyst, followed by copolymerization of said macromers with propylene to make a branched isotactic polypropylene, including all claimed limitations. Although the reference has not mentioned the beta-alkyl elimination mechanism as recited in the instant claims, the reference method uses the same method of obtaining the macromers as set forth in applicant's specification, and therefore at least a non-zero amount of said mechanism would appear to exist in the reference method. The burden of proof is shifted to applicants to show otherwise.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 41, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weng et al. (WO 99/29742).

The parent claims are discussed with respect to this reference above. Although the cited examples have not used the claimed embodiments, all are recommended as alternatives, and therefore one of ordinary skill in the art would be motivated to use same in methods analogous to the working examples. For operating the process in one reaction zone or in series, see page 21, lines 13-15; for operating temperatures of at least 100°C, see page 20, lines 20-22, and the line bridging pages 20 and 21.

10. Claims 41, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weng et al. (WO 98/34971).

The parent claims are discussed with respect to this reference above. Although the cited examples have not used the claimed embodiments, all are recommended as alternatives, and therefore one of ordinary skill in the art would be motivated to use same in methods analogous to the working examples. For operating the process in one reaction zone or in series, see page 20, lines 17-19; for operating temperatures of at least 100°C, see page 19, lines 26-28, and page 20, lines 3-6.

11. Claims 27, 29, 30, 32, 34, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roberto Rábago/
Primary Examiner
Art Unit 1796

RR
September 24, 2008